

AMENDED

Nº 47366

APPLICATION FOR PERMIT

TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office..... OCT 28 1983
Returned to applicant for correction..... DEC 7 1983
Corrected application filed..... DEC 20 1983
Map filed..... DEC 20 1983

The applicant..... Geothermal Development Associates.....
251 Ralston Street....., of..... Reno....., City or Town
Street and No. or P.O. Box No.
Nevada 89503....., hereby make S. application for permission to appropriate the public
State and Zip Code No.
waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) November 28, 1978, Nevada

1. The source of the proposed appropriation is..... ground water
Name of stream, lake, spring, underground or other source
2. The amount of water applied for is..... 3.0..... second-feet
One second-foot equals 448.83 gals. per min.
(a) If stored in reservoir give number of acre-feet.....
3. The water to be used for..... geothermal power
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.
4. If use is for:
(a) Irrigation, state number of acres to be irrigated:.....
(b) Stockwater, state number and kinds of animals to be watered:.....
(c) Other use (describe fully under "No. 12. Remarks")..... geothermal power generation
(d) Power:
(1) Horsepower developed.....
(2) Point of return of water to stream.....
5. The water is to be diverted from its source at the following point: From a well within the NE $\frac{1}{4}$ SE $\frac{1}{4}$
Describe as being within a 40-acre subdivision of public
of said Sec. 29, T. 18 N., R. 20 E., M.D.M., Nev. on a tangent 186.00', bearing
survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.
N54°01'00"E, to the East $\frac{1}{4}$ corner of said Sec. 29.
6. Place of use Portions of SE $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, and NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29, T. 18 N., R. 20 E.,
Describe by legal subdivision. If on unsurveyed land, it should be so stated.
M.D.B. & M., Nevada
7. Use will begin about..... January 1..... and end about..... December 31....., of each year.
Month and Day Month and Day
8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Drilled well and collection system.
State manner in which water is to be diverted, i.e. diversion structure, ditches and
flumes, drilled well with pump and motor, etc.
9. Estimated cost of works..... \$140,000

10. Estimated time required to construct works..... Three years
If well completed, describe works.
11. Estimated time required to complete the application of water to beneficial use..... Three years
12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.
- This well will be one of two or more geothermal production wells having a total diversion of up to eight (8) cfs; consumptive use will be about 1.6 cfs in the power plant evaporative cooling system (1065 ac-ft per year); the balance (6.6 cfs) will be reinjected into the geothermal reservoir by means of injection wells.
- GEOTHERMAL DEVELOPMENT ASSOCIATES
 By s/ G. Martin Booth
 251 Ralston Street
 Reno, Nevada 89503
- Compared js/br 11/bm
- Protested Pro. 3/12/84 by Peter G. and Bernice Guisti, Judith Harvey and Karen Mardian;
3/26/84 by Washoe County; 3/28/84 by Niilo Hyytinen;
Pro. upheld.

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid consumed for a beneficial use.

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with (CONTINUED ON PAGE 2) The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.0 cubic feet per second.

Work must be prosecuted with reasonable diligence and be completed on or before January 8, 1987

Proof of completion of work shall be filed before February 8, 1987

Application of water to beneficial use shall be made on or before January 8, 1990

Proof of the application of water to beneficial use shall be filed on or before February 8, 1990

Map in support of proof of beneficial use shall be filed on or before _____

Completion of work filed FEB 6 1987 IN TESTIMONY WHEREOF, I, PETER G. MORROS,
 State Engineer of Nevada, have hereunto set my hand and the seal of
 Proof of beneficial use filed _____ my office, this 8TH day of JANUARY,
 Cultural map filed _____

A.D. 19 85

Certificate No. MAR 17 1992 Issued _____
 CANCELLED 218 (Rev.) BECAUSE OF FAILURE
 OF APPLICANT TO COMPLY WITH THE PROVISIONS OF PERMIT

State Engineer

STATE ENGINEER

(PERMITS TERMS CONTINUED)

the Proof of Completion.

An annual report for this well must be filed under this permit describing the amount of geothermal fluid consumed to a beneficial use for the calendar year. This report must also detail the amount of fluid produced and injected.

The total combined diversion rate under Permits 47366, 47367, 47368, 47369 and 47370 is limited to 8.0 cubic feet per second.

Permits 47366, 47367, 47368, 47369 and 47370 are issued subject to the terms and conditions set forth in the ruling of the State Engineer on October 30, 1984.

The total withdrawal of the geothermal fluid shall be limited to 5,792 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 10% of the volume withdrawn annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.